AMENDMENTS

Amendments to the claims:

Please cancel claims 28, 29, 41, 47, 48, 65, 66, 83 and 84 without prejudice or disclaimer and please amend claims 25, 44, 61, 79 and 82 as set forth in the complete listing of the claims that follows. This complete listing of the claims replaces previous claim listings.

1-24 (cancelled).

25 (currently amended). A method for activating an antigen presenting cell, which comprises:

transducing an antigen presenting cell *in vitro* or *ex vivo* with a nucleic acid having a nucleotide sequence that encodes a chimeric protein, wherein the chimeric protein comprises a myristoylation membrane targeting region, a FK506 ligand-binding region ~~that can bind to a FK506 and/or FK506 analog molecule~~ and a CD40 cytoplasmic polypeptide region lacking the CD40 extracellular domain; and

contacting the antigen presenting cell with a ~~non-protein~~ multimeric FK506 or FK506 analog ligand that binds to the FK506 ligand-binding region;

whereby the antigen presenting cell is activated.

26 (cancelled).

27 (previously presented). The method of claim 25, wherein the CD40 cytoplasmic polypeptide region is encoded by a polynucleotide sequence in SEQ ID NO: 1.

28 (cancelled).

29 (cancelled).

30 (previously presented). The method of claim 29, wherein the ligand is a dimeric FK506 or a dimeric FK506 analog.

31 (previously presented). The method of claim 30, wherein the ligand is AP1903.

32 (previously presented). The method of claim 25, wherein the nucleic acid is contained within a viral vector.

33 (previously presented). The method of claim 32, wherein the viral vector is an adenoviral vector.

34-42 (cancelled).

43 (previously presented). The method of claim 25, wherein the antigen presenting cell is a dendritic cell.

44 (currently amended). A composition which comprises a nucleic acid having a polynucleotide sequence that encodes a chimeric protein, wherein the chimeric protein comprises a myristoylation membrane targeting region, a FK506 ligand-binding region that can bind to a FK506 and/or FK506 analog molecule, and a CD40 cytoplasmic polypeptide region lacking the CD40 extracellular domain.

45 (cancelled).

46 (previously presented). The composition of claim 44, wherein the CD40 cytoplasmic polypeptide region is encoded by a polynucleotide sequence in SEQ ID NO: 1.

47 (cancelled).

48 (cancelled).

49 (previously presented). The composition of claim 48, wherein the ligand is a dimeric FK506 or a dimeric FK506 analog.

50 (previously presented). The composition of claim 49, wherein the ligand is AP1903.

51 (previously presented). The composition of claim 44, wherein the nucleic acid is contained within a viral vector.

52 (previously presented). The composition of claim 51, wherein the viral vector is an adenoviral vector.

53 (previously presented). The composition of claim 44, wherein the nucleic acid comprises a promoter sequence operably linked to the polynucleotide sequence.

54 (previously presented). The method of claim 25, wherein the ligand-binding region comprises a FKBP12 region.

55 (previously presented). The method of claim 25, wherein the ligand-binding region comprises a FKBP12(V36) region.

56 (previously presented). The method of claim 25, wherein the nucleotide sequence is operably linked to a promoter.

57 (previously presented). The method of claim 25, wherein the nucleic acid is contained within a plasmid.

58 (previously presented). The composition of claim 44, wherein the ligand-binding region comprises a FKBP12 region.

59 (previously presented). The composition of claim 44, wherein the ligand-binding region comprises a FKBP12(V36) region.

60 (previously presented). The composition of claim 44, wherein the nucleic acid is contained within a plasmid.

61 (currently amended). A method for inducing an immune response against an antigen, which comprises

transducing an antigen presenting cell *in vitro* or *ex vivo* with a nucleic acid having a nucleotide sequence that encodes a chimeric protein, wherein the chimeric protein comprises a myristoylation membrane targeting region, a FK506 ligand-binding region ~~that can bind to a FK506 and/or FK506 analog molecule~~ and a CD40 cytoplasmic polypeptide region lacking the CD40 extracellular domain;

contacting the antigen presenting cell with an antigen *ex vivo* or *in vitro*; and

contacting the antigen presenting cell with a ~~non-protein~~ multimeric FK506 or FK506 analog ligand that binds to the FK506 ligand-binding region;

whereby an immune response against the antigen is induced.

62 (previously presented). The method of claim 61, wherein the immune response is a cytotoxic T-lymphocyte (CTL) immune response.

63 (previously presented). The method of claim 61, wherein the immune response is generated against a tumor antigen.

64 (previously presented). The method of claim 61, wherein the CD40 cytoplasmic polypeptide region is encoded by a polynucleotide sequence in SEQ ID NO: 1.

65 (cancelled).

66 (cancelled).

67 (previously presented). The method of claim 66, wherein the ligand is a dimeric FK506 or a dimeric FK506 analog.

68 (previously presented). The method of claim 67, wherein the ligand is AP1903.

69 (previously presented). The method of claim 61, wherein the nucleic acid is contained within a viral vector.

70 (previously presented). The method of claim 69, wherein the viral vector is an adenoviral vector.

71 (previously presented). The method of claim 61, wherein the antigen presenting cell is a dendritic cell.

72 (previously presented). The method of claim 61, wherein the ligand-binding region comprises a FKBP12 region.

73 (previously presented). The method of claim 61, wherein the ligand-binding region comprises a FKBP12(V36) region.

74 (previously presented). The method of claim 61, wherein the nucleotide sequence is operably linked to a promoter.

75 (previously presented). The method of claim 61, wherein the nucleic acid is contained within a plasmid.

76 (previously presented). The method of claim 61, which comprises administering the antigen presenting cell to a subject.

77 (previously presented). The method of claim 76, wherein the antigen presenting cell is administered to the subject by intradermal administration.

78 (previously presented). The method of claim 76, wherein the antigen presenting cell is administered to the subject by subcutaneous administration.

79 (currently amended). A method for inducing an immune response against an antigen *in vivo*, which comprises administering to a subject by a propelling force a composition that includes particles, a nucleotide sequence encoding a chimeric protein and a nucleotide sequence encoding an antigen,

wherein the chimeric protein comprises a myristoylation membrane targeting region, a FK506 ligand-binding region that can bind to a FK506 and/or FK506 analog molecule and a CD40 cytoplasmic polypeptide region lacking the CD40 extracellular domain, and

whereby an immune response is induced against the antigen.

80 (previously presented). The method of claim 79, wherein the particles are gold particles.

81 (previously presented). The method of claim 79, wherein the CD40 cytoplasmic polypeptide region is encoded by a polynucleotide sequence in SEQ ID NO: 1.

82 (currently amended). The method of claim 79, which further comprises administering a ~~non-protein~~ multimeric FK506 or FK506 analog ligand that binds to the ligand-binding region.

83 (cancelled).

84 (cancelled).

85 (previously presented). The method of claim 84, wherein the ligand is a dimeric FK506 or a dimeric FK506 analog.

86 (previously presented). The method of claim 85, wherein the ligand is AP1903.

87 (previously presented). The method of claim 79, wherein the nucleic acid is contained within a viral vector.

88 (previously presented). The method of claim 87, wherein the viral vector is an adenoviral vector.

89 (previously presented). The method of claim 79, wherein the propelling force is an electrical current.

90 (previously presented). The method of claim 79, wherein the immune response is a cytotoxic T-lymphocyte (CTL) immune response.

91 (previously presented). The method of claim 79, wherein the antigen is a tumor antigen.

92 (previously presented). The method of claim 79, wherein the ligand-binding region comprises a FKBP12 region.

93 (previously presented). The method of claim 79, wherein the ligand-binding region comprises a FKBP12(V36) region.

94 (previously presented). The method of claim 79, wherein the nucleotide sequence is operably linked to a promoter.

95 (previously presented). The method of claim 79, wherein the nucleotide sequence encoding the antigen and the nucleotide sequence encoding the chimeric protein are in plasmid DNA.